STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

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In the matter of the application of **Consumers Energy Company** for Approval of a Power Supply Cost Recovery Plan and for authorization Of monthly Power Supply Cost Recovery Factors for the year 2011	)	Case No. U-16432

NOTICE OF PROPOSAL FOR DECISION

The attached Proposal for Decision is being issued and served on all parties of record in the above matter on October 12, 2011.

Exceptions, if any, must be filed with the Michigan Public Service Commission, P.O. Box 30221, 6545 Mercantile Way, Lansing, Michigan 48909, and served on all other parties of record on or before November 2, 2011, or within such further period as may be authorized for filing exceptions. If exceptions are filed, replies thereto may be filed on or before November 16, 2011. **The Commission has selected this case for participation in its Paperless Electronic Filings Program. No paper documents will be required to be filed in this case.**

At the expiration of the period for filing exceptions, an Order of the Commission will be issued in conformity with the attached Proposal for Decision and will become effective unless exceptions are filed seasonably or unless the Proposal for Decision is reviewed by action of the Commission. To be seasonably filed, exceptions must reach the Commission on or before the date they are due.

MICHIGAN ADMINISTRATIVE HEARING SYSTEM
For the Michigan Public Service Commission

Dennis Mack

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Dennis W. Mack
Administrative Law Judge

October 12, 2011
Lansing, Michigan

STATE OF MICHIGAN

MICHIGAN ADMINISTRATIVE HEARING SYSTEM

FOR THE MICHIGAN PUBLIC SERVICE COMMISSION

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In the matter of the application of) **Consumers Energy Company** for) Approval of a Power Supply Cost) Recovery Plan and for authorization) Of monthly Power Supply Cost) Recovery Factors for the year 2011)	Case No. U-16432

PROPOSAL FOR DECISION

I.

PROCEDURAL HISTORY

On September 30, 2010, Consumers Energy Company (Consumers) filed an Application with the Michigan Public Service Commission (Commission) under Section 6j of 1982 PA 304 (Act 304). MCL 460.6j. The Application seeks approval of a power supply cost recovery (PSCR) plan and monthly factors for the 2011 calendar year. In that filing, Consumers seeks a uniform maximum PSCR factor of $0.00205 per kWh for all classes of its customers. The PSCR plan also included a five-year forecast of Consumers' customer power supply requirements, the sources of supply, and the projected costs of providing that supply.

Pursuant to due notice, a pre-hearing conference was conducted on December 6, 2010, during which Consumers and Commission staff appeared. 1 TR 5. In addition, intervention was granted to: the Michigan Attorney General

(Attorney General); the Michigan Environmental Council (MEC); the Michigan Community Action Agency Association (MCAAA); Midland Cogeneration Venture Limited Partnership; Hemlock Semiconductor Corporation; and Association of Businesses Advocating Tariff Equity (ABATE). A schedule was established during the pre-hearing, which was subsequently amended at the request of the parties, for the processing of this case. [1]

The hearing in this matter was conducted on May 25 and 26, 2011. During the hearing, Consumers entered the testimony of: Laura M. Collins, Senior Rate Analyst; Andrew C. Dotterweich, Transmission and Regulatory Strategies Director; David B. Kehoe, Director of Staff, Electric Generation; Lincoln D. Warriner, Senior Business Support Consultant; Richard J. Polena, Principal Engineer; Brian D. Gallaway, Fuels Transportation and Planning Director; and David F. Ronk, Jr., Director for Electrical Transactions and Resource Planning. In addition, Consumers entered rebuttal testimony of Mr. Dotterweich, Mr. Gallaway, and Mr. Polena, along with second rebuttal testimony of Mr. Ronk. Consumers also entered exhibits A-1 through A-26, ad seriatim. The MEC offered the direct and surrebuttal testimony of George E. Sansoucy, P.E., the principal of George E. Sansoucy, P.E., LLC.[2] The MEC entered exhibits MEC-1 through MEC-32, ad seriatim. None of the other parties offered any witnesses or exhibits. Consistent with the schedule discussed above,

[1] The pre-hearing conference was conducted by Administrative Law Judge Daniel E. Nickerson, Jr., and upon his retirement the case was transferred to the undersigned.
[2] Mr. Polena, Mr. Gallaway and Mr. Ronk were cross-examined. The parties waived their right to cross-examine the other witnesses.

Consumers, the Attorney General, and the MEC filed initial briefs and reply briefs, while the MCAAA filed an initial brief and ABATE filed a reply brief.

Two issues were addressed through motions decided at the commencement of the hearing on May 25, 2011. The first was a joint motion, filed by Consumers and the MEC, for a Protective Order applicable to Exhibits A-25, MEC-29, MEC-30 and MEC-31. The motion was granted and the Protective Order was entered on May 25, 2011. Pursuant to its terms, the exhibits are entered on the public record in redacted form, and complete versions of the documents are maintained in a separate and confidential record. The other issue was a Motion to Strike filed by Consumers and concerning the direct and surrebuttal testimony of Ronald C. Callen, a witness offered by the MCAAA. Mr. Callen's proposed testimony concerns the disposition of fees collected by Consumers for Spent Nuclear Fuel between 1983 and 2007. Because Consumers does not propose to incur any nuclear fuel costs or costs associated with SNF during 2011, the proposed evidence was deemed irrelevant, and thus inadmissible under MCL 24.275 and MRE 402. 2 TR 34. As a result, the Motion to Strike was granted.[3] Consistent with that ruling, the MCAAA's arguments concerning the fees were not litigated or briefed, and thus will not be addressed in this Proposal for Decision.

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[3] On May 26, 2011, the MCAAA obtained a Temporary Restraining Order from the Ingham County Circuit Court that stayed this proceeding pending the Commission's review of the ruling. On May 31, 2011, the MCAAA filed an Application for Leave to Appeal with the Commission seeking a reversal of the ruling on the Motion to Strike. On June 3, 2011, the Court dissolved the stay and dismissed for lack of jurisdiction the MCAAA's Petition for Interlocutory Appeal. In an Order entered on July 12, 2011, the Commission denied the MCAAA's application for leave to appeal the ruling striking Mr. Callen's testimony. On August 11, 2011, the MCAAA filed a Petition for Rehearing of that Order with the Commission, which is still pending as of the date of the Proposal for Decision.

II.

STATUTORY REQUIREMENTS

Act 304 provides for PSCR clauses that "permits the monthly adjustment of rates for power supply to allow the utility to recover the booked costs, including transportation costs, reclamation costs, and disposal and reprocessing costs, of fuel burned by the utility for electric generation and the booked costs of purchased and net interchanged power transactions by the utility, incurred under reasonable and prudent policies and practices." MCL 460.6j(1)(a). Implementation of a PSCR clause requires the utility to annually file a "plan describing the expected sources of electric power supply and changes in the cost of power supply anticipated over a future 12-month period specified by the commission and requesting for each of those 12 months a specific power supply cost recovery factor." MCL 460.6j(3). In addition, a PSCR plan must:

> [D]escribe all major contracts and power supply arrangements entered into by the utility for providing power supply during the specified 12-month period. The description of the major contracts and arrangements shall include the price of fuel, the duration of the contract or arrangement, and an explanation or description of any other term or provision as required by the commission. The plan shall also include the utility's evaluation of the reasonableness and prudence of its decisions to provide power supply in the manner described in the plan, in light of its existing sources of electrical generation, and an explanation of the actions taken by the utility to minimize the cost of fuel to the utility.
> MCL 460.6(j)(3).

Contemporaneous with the PSCR plan, the Company must file with the Commission:

> [A] 5-year forecast of the power supply requirements of its customers, its anticipated sources of supply, and projections of power supply costs, in light of its existing sources of electrical

> generation and sources of electrical generation under construction. The forecast shall include a description of all relevant major contracts and power supply arrangements entered into or contemplated by the utility, and such other information as the commission may require.
> MCL 460.6j(4).

Upon the filing of the PSCR plan and 5-year forecast, the Commission must:

> [C]onduct a proceeding, to be known as a power supply and cost review, for the purpose of evaluating the reasonableness and prudence of the power supply cost recovery plan filed by a utility pursuant to subsection (3), and establishing the power supply cost recovery factors to implement a power supply cost recovery clause incorporated in the electric rates or rate schedule of the utility.
> MCL 460.6j(5).

Accordingly, this case requires a determination of the reasonableness and prudence of both the decisions underlying Consumers' proposed plan, along with the proposed plan itself. MCL 460.6j(5)(6).

III.

PROPOSED 2011 PSCR PLAN

A. Five Year Forecast

Consistent with the requirements of Act 304, Consumers submitted a 5-year forecast of the power supply requirements for various types of its customers. Mr. Warriner testified he prepared forecast models and data pertaining to electric deliveries and peak demands for the period of 2011 to 2015. 2 TR 95. The data includes forecasts of load supplies generated by Consumers' facilities and alternate energy suppliers, along with projected retail open access and full service sales. Exhibits A-18 and A-19. The models are based primarily on regression analysis, and to lesser extent, economic forecasts, weather variables, manufacturing productivity, wholesale usage, and trends that would not be included in past data, such as Consumers' Energy Optimization Plans or the developing market for electric vehicles. 2 TR 97-98.

In addition to Mr. Warriner's testimony, various other witnesses testified to Consumers' five year forecast. Mr. Ronk testified to the generation requirements Consumers forecasts for 2011-2015. Exhibit A-16. Mr. Polena testified regarding power purchase agreements (PPAs), including the rates and duration, between Consumers and non-utility generators. 2 TR 117. A listing of the PPAs and the estimated purchases, based either on historical data or the terms of the agreements, was entered as Exhibit A-15. Mr. Polena also testified to projected power supply costs during the forecast period. Exhibit A-14. Mr. Dotterweich testified to other costs Consumers will incur between 2011 and 2015, including transmission and energy market administration expenses. 2 TR 70; Exhibit A-2. Finally, Mr. Kehoe testified to emission allowances for the forecast period, including a tabulation of Consumers' allowance inventory, forecasted emissions and allowances surrendered to the U.S. Environmental Protection Agency. 2 TR 88; Exhibits A-10 and A-11.

The Attorney General takes issue with Consumers' request that its five year forecast be approved. In support, the Attorney General notes the express language of MCL 460.6j(7) only requires the Commission "evaluate the decisions underlying the five-year forecast…." Conversely, MCL 460.6j(6) requires the Commission "evaluate the reasonableness and prudence of the decisions underlying the power supply cost recovery plan filed by the utility pursuant to subsection (3), and shall approve, disapprove, or amend the power supply cost recovery plan accordingly." Absent the "approve, disapprove or amend" language in MCL 460.6j(6), the Attorney General argues the Commission has no authority to approve the forecast under MCL 460.6j(7).

The Commission addressed the argument the Attorney General advances in this case in its decision on Consumers' 2009 PSCR Plan, where it acknowledged that MCL 460.6j(7) requires the evaluation of the forecast, but does not expressly require its approval. January 25, 2010 Opinion and Order, p 5, Case No. U-15675. However, the Commission held approval of the PSCR plan "inherently includes approval of the forecast" Id. However, such approval only means the "forecast is a reasonable one for the plan when it is submitted", but "does not suggest a guarantee of accuracy" because by its nature a forecast "will vary up and down from actual results." [4] *Id*. In this case, the uncontroverted evidence on this record supports the conclusion that Consumers' five year forecast is reasonable, and contingent on the ultimate approval of the PSCR plan, complies with the requirements of MCL 460.6j(4) and MCL 460.6j(7).

B. <u>2011 PSCR Factors</u>

As noted, the Application seeks the approval of a maximum monthly PSCR factor of $0.00205 per kWh for all classes of customers. For the purpose of an overview, Ms. Collins prepared Exhibit A-1, which identifies the various PSCR plan expenses that went into the formulation of the proposed factor. In

[4] The Order also noted that under MCL 460.6j(7) the Commission may indicate that a cost item in a forecast is unlikely to be recoverable in a future proceeding. There is no evidence on this record that the forecast under review in this case contains such a cost item.

general, Ms. Collins testified that the estimated system power supply costs, net transmission expenses, total environmental costs, and the 2010 Underrecovery amount were added together to establish a total system power supply cost of $1,848,894,547, which was then divided by the total system requirements in kWh to set an average cost per kWh of $0.05055. Exhibit A-1; 2 TR 58. Subtracting the base recovery factor from the average cost per kWh results in a Remaining Cost per kWh of $0.00189, which is multiplied by a Line and Transformation Loss Factor to arrive at the proposed 2011 PSCR factor. Ms. Collins testified the elements used in the equation came from a number of other witnesses. 2 TR 58.

Mr. Ronk testified that the 2011 PSCR Plan includes a 4.5% Capacity Planning Reserve Margin Target, which is the amount of capacity Consumers must maintain to provide adequate electric supply for each season. 3 TR 316. The Plan also identifies the steps Consumers proposes to take in 2011 to meet that target and its load requirements, including its summer-peaking systems and contracts with Non-Utility Generators. 3 TR 316-317. The Plan also includes contracts previously approved by the Commission, but not included in previous years' PSCR Plans, along with contracts and company-owned resources not previously approved. 3 TR 391-320. Mr. Ronk testified Consumers will not have to acquire additional capacity to meet demand in 2011, and has projected an excess that will be sold. The 2011 PSCR Plan also treats costs associated with its Renewable Resource Program, Renewable Energy Plan, and Energy Optimization Program in a manner consistent with Act 304 and Commission Orders. 3 TR 233-326.

The 2011 PSCR plan projects a System Power Supply Cost of $1,597,265,000, which includes the expense for energy generated by coal steam, gas and oil, nuclear power obtained under the Palisades Power Purchase Agreement approved in Case No. U-14992, and peakers, along with purchased energy and that obtained through net interchanges. [5] Exhibit A-13. Consumers projects $242,920,285 in System Transmission Expenses for 2011, which is the net of the total system expenses and revenues under the Midwestern Independent System Operator, Inc., (MISO) tariff. [6] Exhibit A-2; 2 TR 70-71. Environmental costs for 2011 are projected at $2,604,018, and include NOx Allowance and Urea expenses. 2 TR 87-91. The 2011 PSCR plan sets Consumers' 2010 underrecovery at $6,105,244, which is characterized as consistent with the holding in the Commission's December 21, 2006 Order in Case No. U-15001. The sum of these projected expenses results in Total System Power Supply Costs of $1,848,894,547. Exhibit A-1.

Having established its projected Total System Power Supply Costs for 2011, Consumers set about calculating its recovery through a per kWh power supply cost recovery factor. The Total System Requirements in kWh for 2011 was calculated by Mr. Warriner, who took monthly generation requirements and removed the amount provided in the Retail Open Access program, arriving at a net total of 36,573,385 MWh. Exhibit A-21; See also A-13 for the 12 energy generation sources and 2 TR 96-105 for the methodology and considerations

[5] Mr. Polena testified net interchanges represent "purchases from and sales to other entities." 2 TR 120.
[6] Consumers offers its units on the MISO market for day-ahead commitment, which then determines which of the units in its territory, consisting of 13 states and 1 Canadian province, are economically feasible to dispatch. 2 TR 124.

underlying the calculation. Dividing the Total System Power Supply Costs of $1,848,894,547 by the Total System Requirements in kWh of 36,573,385,000 results in an Average Cost of Requirements of $0.05055 per kWh. Exhibit A-1. That amount was reduced by a Base Recovery Factor set by the Commission in Case No. U-15645, and a Line & Transmission Loss Factor periodically set by the Commission in Consumers' electric rate cases to arrive at a Remaining Cost per kWh of $0.00189. Applying a Line and Transformation Loss Factor of 1.086, per Rule C-8 of Consumers' Tariff, results in a proposed 2011 PSCR factor of $0.00205. Exhibit A-1.

IV.

CHALLENGES TO THE 2011 PSCR PLAN AND FACTORS

A. The Attorney General

The Attorney General takes issue with the $49,177,148 expenditures the 2011 PSCR Plan projects for as-burned oil and gas. Exhibit A-5. During discovery, Mr. Gallaway stated the projected natural gas costs for Consumers' Zeeland power plant was reduced by $2,995,000 due to an error in the initial calculation. MEC-4 (Revised). The proposed PSCR factor of $0.00205, which is based on a calculation that includes the erroneous amount, has not been amended to reflect this error. 2 TR 274. The Attorney General contends that this evidence requires a corresponding reduction in the Total System Power Supply Costs and 2011 PSCR factor. Since the projected expenditure for as-burned oil and gas contained in Exhibit A-5 is inaccurate based on MEC-4 (Revised) and

Mr. Gallaway's testimony, the Attorney General's argument is correct. Therefore, the Total System Power Supply Costs amount and the 2011 PSCR factor should be reduced accordingly. [7]

B. The MEC

1. Over-Collection of 2011 PSCR Costs

The MEC contends the 2011 PSCR factor should be reduced based on the increase in the proposed Total System Power Supply Costs relative to those in its 2010 Plan, and the over-collection of 2011 PSCR costs through Consumer's self-implementation. [8] It is undisputed that the projected $1,848,894,547 of Total System Power Supply Costs for 2011 represents an increase from both the projected and actual power supply costs in 2010. 2 TR 407-408. The mere fact that the 2011 PSCR Plan projects such an increase does not, standing alone, render it unreasonable, or the decisions underlying it imprudent. Rather, it is the underlying decisions and considerations expressly enumerated in MCL 460.6j(6), which control that determination. Consistent with this provision, the mere fact a Total System Power Supply Cost is higher, or lower, than that of a previous year, has no legal significance.

The second prong of this issue is the effect of the over-collection of $35,762,047 for the first 4 months of 2011 under Consumers' self-implemented PSCR factor. 3 TR 389. The MEC seeks the reduction in the proposed 2011 PSCR factor, under the principle that it should be as accurate as possible during

[7] The Attorney General also supports the MEC's contention, advanced by its witness Mr. Sansoucy, that Consumer's projected costs for coal and natural gas are excessive, and its dispatch modeling is uneconomic. The validity of these arguments are addressed below.
[8] ABATE concurs with the MEC's argument on this issue.

the time period it is in effect, as opposed to remedying over-collections during the reconciliation process, based on the 2011 over-collection amount. MEC Initial Brief, p 11. Consumers contends this argument is flawed for a number of reasons. First, by raising the issue in its initial brief, the MEC improperly precludes Consumers from offering rebuttal evidence. A review of the record reveals the issue of over-collections in 2011 arose in the MEC's cross-examination of Mr. Ronk. 3 TR 387-390. Subsequently, Consumers addressed the issue in its re-direct of Mr. Ronk. 3 TR 391-394. Based on that evidence, the MEC argues the over-collections, standing alone, requires an adjustment to the PSCR factor. Thus the MEC is advancing a legal argument, i.e. the effect of the over-collection in this case, as opposed to a factual issue, e.g. the actual amount of over-collection for the first 4 months of 2011. Consumers could, and did, respond to the MEC's legal argument in its reply brief. Therefore, Consumers' contention that it was unable to offer rebuttal evidence concerning the effect of the 2011 over-collection, cannot be sustained. Accordingly, the MEC's argument does not contrive Consumers' rights under the Administrative Procedures Act, and the Rules on Practice and Procedure before the Commission. See MCL 24.272(4) and R 460.17325(3).

This leaves the question of what, if any, legal effect the over-collection of $35,762,047 in PSCR costs for the first 4 months of 2011 has on the 2011 PSCR Plan. Pending the disposition of this case, Consumers "may each month adjust its rates to incorporate all or a part of the power supply cost recovery factors requested in its plan." MCL 460.6j(9). Because it is based on a forecast, an over-collection or under-collection under a self-implemented PSCR factor is not atypical. 3 TR 393. Consumers updates the forecast and factor during the course of the year, including the estimate it makes in September of 2011 for the 2012 PSCR Plan. 3 TR 392. Act 304 recognizes the nature of the self-implemented factor by requiring over-collections be promptly refunded with interest during the reconciliation process. MCL 460.6j(9). As was the case with the increase in the 2011 projected power supply costs versus the actual power supply costs in 2010, an over-collection does not, standing alone, render the 2011 PSCR Plan unreasonable, or the decisions underlying it imprudent under Act 304. The only substantive evidence on this record is Mr. Ronk's testimony that the self-implemented PSCR factor was based on forecasts that were intended to collect sufficient revenue to cover its PSCR expenses over the course of a year, and will be continually adjusted based on actual conditions. 3 TR 392-393. Consistent with this testimony, and given that any over-collection existing at the end of 2011 will be promptly refunded, the MEC's argument that the 2011 PSCR factor should be reduced commensurate with the $35,762,047 in over-collections for the first 4 months of 2011, is rejected.

2. <u>Projected Cost of Natural Gas</u>

In regards to natural gas costs, the MEC focused on the commodity price projection for natural gas and a pipeline demand charge Consumers pays to SEMCO for natural gas delivery to its Zeeland Generating Plant (Zeeland). Mr. Sansoucy testified the cost of natural gas for Zeeland in 2011 is projected at $5.3653 per MMBtu. That amount includes a commodity price of $4.646 per

MMBtu, which is based on the NYMEX price strip at the Henry Hub as of August 26, 2010. [9] 3 TR 414; MEC-15. The actual cost of natural gas on the NYMEX in the first 4 months of 2011 has been between $4.027 and $4.490 per MMBtu, for an average of $4.21 per MMBtu. 3 TR 427-428; MEC-26. This amount is within the range of two forecasts of 2011 natural gas prices cited by Mr. Sansoucy, who notes that is the third straight year, Consumers has over-priced the cost of natural gas in its PSCR Plan. 3 TR 414, 427-428. Accordingly, Mr. Sansoucy opines the 2011 Plan's commodity price component of its projected cost of natural gas for Zeeland is unrealistic and unsupported. 3 TR 403. Based on this evidence, the MEC seeks a $1,051,741 adjustment to the power supply cost used to set the maximum PSCR factor.

Consumers advances a number of arguments concerning Mr. Sansoucy's characterization of the commodity price component of the price of natural gas it projected in the 2011 PSCR Plan. First, it notes it was required under MCL 460.6j(3) to set a projected price when developing the Plan in September of 2010. The test is whether that projection was reasonable and prudent at the time it was made. See MCL 460.6j(5); See also Commission's March 27, 2007 in Case No. U-14992, p 57, citing *ABATE v PSC,* 208 Mich App 248, 267 (1994) and *Attorney General v PSC,* 161 Mich App 506, 517 (1987). Under these principles, Mr. Sansoucy's testimony consists of hindsight, as opposed to a legitimate basis to find the use of the NYMEX price strip at the Henry Hub as of

[9] According to a discovery response: "Henry Hub is the pricing point for the natural gas futures contracts traded on the New York Mercantile Exchange (NYMEX) and is generally seen to be the primary price set for the North American natural gas market. The settlement prices at the Henry Hub are used as benchmarks for the entire North American Natural gas market. Accordingly, Consumers Energy uses the NYMEX Henry Hub as a basis for its gas price projections." MEC 44.

August 26, 2010, as the projected commodity price of natural gas in 2011 is unreasonable and imprudent.

As for the projected commodity price of natural gas in the 2011 PSCR Plan, Mr. Polena testified the $4.65 per MMBtu is the average of the projected price for each month of 2011. 2 TR 127. When utilizing the actual price as of May 3, 2011, along with the revised projection for the remainder of the year, the 2011 average is projected at $4.60 per MMBtu. Exhibit A-24. The $0.05 per MMBtu difference between that amount and the projected commodity price in the 2011 PSCR Plan is insignificant, especially in light of the volatility in the market and the necessity to formulate the projection in August of 2010. 2 TR 127. In addition, the projected commodity price is closely aligned with subsequent projections and actual costs cited by Mr. Sansoucy. 3 TR 415. For the purposes of this inquiry, and based on the evidence on this record, the projected natural gas commodity price of $4.65 per MMBtu proposed in the 2011 PSCR Plan is reasonable and prudent.

The second component of the MEC's argument concerning the Plan's projected natural gas costs pertains to charges attributable to the SEMCO pipeline. The pipeline transports natural gas 7.5 miles from an ANR pipeline to Zeeland, and the charge is set in a transportation contract between SEMCO and SEI Michigan, which is the former owner of the Plant. [10] MEC-32. The contract calls for Consumers to pay SEMCO a $2,995,000 Balloon Payment in the 12th year after its effective date unless it acts to extend the agreement. MEC-32,

[10] Consumers became SEI Michigan's successor in interest in the contract upon its purchase of the Zeeland Plant in 2007. 2 TR 294.

pp 16-17. In a discovery response, Mr. Gallaway stated that charge was mistakenly included in the 2011 PSCR Plan and is being rectified in the monthly PSCR factor calculation. MEC-3 and 3 TR 365. Therefore, it is unnecessary to adjust the 2011 PSCR Plan's projected power supply costs to reflect the fact the $2,995,000 Balloon Payment is not yet due.

Mr. Sansoucy testified that dividing the SEMCO Demand Charge of $2,295,000 by the amount of natural gas proposed to be used at the Plant in 2011 equates to a $0.406 per MMBtu cost. 3 TR 421. Mr. Sansoucy opined that since the projected volume of the gas is based on a 10% capacity factor, and if that goes up, the fee would go down, the projected cost of natural gas at the Zeeland Plant in the 2011 PSCR Plan should be reduced. 3 TR 429. The contract grants Consumers the right to purchase the pipeline for $1.00 in the 12th year after its effective date, i.e. 2012. Mr. Sansoucy testified this provision means the Demand Charge covers more than transportation costs, and is properly considered an installment payment towards the eventual purchase of the pipeline. 3 TR 416. Mr. Sansoucy notes this is supported by the fact that the cost to transport gas through the 7.5 mile SEMCO pipeline is twice the cost to transport the gas from the Gulf of Mexico or Western Canada to the connection. Since "transportation costs attributable to capital investments to develop a utility's capability to transport fuel…" are not recoverable through a PSCR factor under MCL 460.6j(6) & (13), the MEC contends a substantial portion of the SEMCO Demand Charge should be excluded from the 2012 PSCR Plan.

Mr. Gallaway testified the SEMCO pipeline was built for the sole purpose of transporting up to 186,000 MCF of natural gas per day from the ANR pipeline to Zeeland. 2 TR 220. The demand charge for using the pipeline, which under the contract escalates at the beginning of its term and then decreases, is the same irrespective of the actual volume of gas transported. Thus Mr. Gallaway's characterization of the per-unit cost basis Mr. Sansoucy affixed to the pipeline as meaningless is accurate. 2 TR 220. The evidence on this record indicates the annual demand charge is the cost Consumers incurs to ensure a consistent supply of natural gas sufficient to meet the operational requirements of Zeeland. Accordingly, the SEMCO Demand Charge of $2,295,000 does not equate to a $0.406 per MMBtu cost to transport natural gas 7.5 miles from the ANR pipeline to Zeeland.

This leaves the question of whether the Annual Demand Charge constitutes an installment payment towards the eventual purchase of the SEMCO pipeline. It is unknown whether Consumers will exercise its right in this regard, but if it purchases the pipeline it will become an asset and part of Consumers' ratebase. As it now stands, Consumers is a party to a contract that obligates it to pay $2,295,000 in 2011 in exchange for the daily availability of 186,000 MCF of natural gas transportation on the SEMCO pipeline. Beyond Mr. Sansoucy's testimony, which is fairly characterized as an interpretation of an unambiguous contract provision, the record is devoid of any evidence to support the MEC's argument that a substantial portion of the payment is a capital investment in the

SEMCO pipeline. Therefore, Mr. Sansoucy's testimony concerning the nature of the SEMCO Demand Charge cannot be accepted.

3. Economic Dispatch

Both the MEC and the Attorney General challenge the dispatch modeling provisions of the 2011 PSCR Plan, specifically as it pertains to Consumers' coal-fired and natural gas generating units. In general, Mr. Gallaway testified that Consumers follows the industry standard for economic dispatch: fixed, sunk, or non-variable costs are not factored in the dispatch decision. 2 TR 222. These include capital costs associated with the generating plant asset, plant operating, maintenance and fuel handling expenses that exist independent of the level of output of the plant, and fuel commitments that have been made to provide and maintain inventory for expected unit operation. The costs that are considered in the dispatch decision are variable, such as the plant operating, maintenance and fuel handling expenses that exist independent of the level of output of the plant, and replacement fuel costs. The variable costs are used to ensure that as the system load increases, the least expensive MW on the system is loaded next, and as system load decreases, the most expensive MW is unloaded. 2 TR 223. Mr. Polena testified that the use of variable costs, as opposed to fixed costs, is mandated by MISO, which is the dispatch authority over Consumers' generating units. [11] 2 TR 123.

The MEC contends that Consumers' power supply costs are excessive because it relies too much on its coal-fired generation facilities and not enough

[11] Consumers' generating units are dispatched to serve the MISO load, of which Consumers' load is a subset. 2 TR 125.

on natural gas generated energy. Mr. Sansoucy notes the projected dispatch in the 2011 Plan proposes, relative to 2010, increased generation by its coal burning units to off-set a 189,672 MWh decrease in the generation from the Zeeland plant, which burns natural gas. Mr. Sansoucy opines this is economically inefficient because the cost of coal will be higher in 2011 than it was in 2010, while the cost of natural gas will be at or below 2010 prices. 3 TR 412-413. To remedy this purported economic inefficiency, Mr. Sansoucy testified the total 2,020,933 MWh generated at the coal-fired Whiting Units 1, 2 & 3 (Whiting) could be replaced if Zeeland's capacity factor was increased to 52% from the 10.83% proposed for 2011. [12] 3 TR 419. Mr. Sansoucy opined increasing Zeeland's capacity to this extent is reasonable based on studies that he asserts indicate that for various time-periods between 2009-2011 the facility was economic to dispatch as a base load plant when comparing the operating costs, i.e. fuel and variable expenses, and the value of the energy generated. 3 TR 419. Mr. Sansoucy also contends the price of natural gas would be further reduced if the cost did not include the portion of the SEMCO demand charge that he terms as an installment payment for its eventual purchase.

Mr. Sansoucy focuses on Whiting, a coal fired plant designated as "must run", and the Zeeland, a natural gas plant that operates in cycling mode. In essence, Mr. Sansoucy believes the costs associated with Whiting in the 2011 Plan are under-estimated, while the costs associated with Zeeland are over-estimated:

[12] ABATE concurs in the MEC's argument that Zeeland's capacity should be increased.

> Consumers' projected dispatch cost for the Whiting units is not consistent with the fuel and variable operating costs reported by the Company. In Exhibit MEC-8, the Company projects a fuel cost for the Whiting units of $3.42 per MMBtu. This burn cost needs to be multiplied by the efficiency of the units, which are reported in Exhibit MEC-22 to be approximately 10,800 Btu per kWh. The total fuel cost is therefore $3.42 times 1.08, for 3.69 cents per kWh or $36.90 per MWh.
>
> The variable costs must then be added to the fuel costs to represent the total dispatch cost the way Consumers has described it to be determined by the Midwest Independent System Operator. The variable costs for Whiting can be found on Exhibit MEC-23, page 403.2 of the Company's FERC Form 1, last issued for 12/31/2009. Summing lines 19 (production expenses), 22 (steam expenses), 25 (electric expenses), and 26 (miscellaneous steam power expenses) for Whiting results in total variable operating costs of $5,954,557. Dividing these variable operating costs by 1,713,405 MWh of net generation in line 12 equals variable costs of approximately $3.48 per MWh.
>
> Adding $3.48 per MWh in variable costs to $36.90 per MWh in total fuel costs equals a dispatch cost of $40.38 per MWh. This calculation is provided in Exhibit MEC-25. It is greater than the adjusted Zeeland dispatch cost I calculated above based on conservatively more accurate inputs.
> 3 TR 422-423

Mr. Sansoucy also focused on coal and transmission costs indentified in the 2011 PSCR Plan to support his conclusion that the operation of the coal-fired units are economically imprudent. In regards to coal, Mr. Sansoucy noted the cost increased 22% between 2010 and 2011. While the increase is primarily due to increased transportation costs that are being incurred throughout the country, he estimated Consumers' transportation costs for western coal constitute 68% of the price, while a forecasting service set the industry average at 57%. 3 TR 411-412; Exhibits MEC-8 & MEC-12. Mr. Sansoucy notes the Whiting Plant has the highest commodity and transportation costs for western coal compared to the other plants in Consumers' fleet. 3 TR 412-413. Mr. Sansoucy contends Consumers has not taken any steps to reduce its coal costs. Mr. Sansoucy notes transmission costs have been increasing since Consumers sold its line, and between 2010 and 2011, the cost increased 5.42%. Given this, he recommends the Commission require Consumers to perform a long-term forecast and develop a plan to address the rising transmission costs.

Based on the foregoing, Mr. Sansoucy recommends an adjustment of the 2011 PSCR Plan factor commensurate with the difference between the dispatch cost of the generation of 2,020,933 MWh at Whiting to the dispatch cost for the generation of the same amount of energy at Zeeland. 3 TR 425.

There are a number of flaws in Mr. Sansoucy's contention that the dispatch cost projected for Whiting is significantly less than that at Zeeland, which underlies his main contention that the generation should be transferred from one facility to the other. First, the average 2011 commodity price of natural gas Mr. Sansoucy contends the Plan should utilize, $4.21 per MMBtu, is too low. As discussed above, the 2011 PSCR Plan projected a monthly average price of $4.65 per MMBtu, which based on this record was reasonable and prudent when it was established in September of 2010. Accordingly, the cost savings of replacing coal-fired generation with natural gas generation is not as extensive as Mr. Sansoucy claims. Concomitantly, the characterization of a portion of the Annual Demand Charge under the SEMCO pipeline contract as an installment charge for its eventual purchase is not supported by the evidence on this record. Rather, the evidence indicates the contract obligates Consumers to pay

$2,295,000 in 2011 in exchange for the daily availability of 186,000 MCF of natural gas transportation to Zeeland via the SEMCO pipeline. In regards to coal, Mr. Sansoucy simply relies on the difference between the cost in 2010 and projected cost in 2011 as an indication that this aspect of the 2011 PSCR Plan is unreasonable. In so doing, he fails to consider the market forces that contribute to the increase in the cost of coal, or that Consumers' coal purchases are made at the lowest prices available through competitive bidding. 2 TR 207-208. His opinion also does not consider the fact that the coal delivered to Whiting is, compared with other facilities in Consumers' system, more expensive due to its location and transportation service being only available from one carrier. 2 TR 215.

Mr. Sansoucy testified the variable costs for Whiting is $3.48 per MWh. However, Mr. Polena noted the calculation Mr. Sansoucy used to arrive at that figure included operating expenses. When utilizing the proper calculation, Mr. Polena testified the variable cost component of the Whiting 1 dispatch cost is $0.78 per MWh. 2 TR 129. Accordingly, utilizing Zeeland to replace the 2,020,933 MWh generated at Whiting would result in a higher dispatch cost. Further, the component of the projected Total System Power Supply Costs attributable to Whiting in the 2011 PSCR Plan is reasonable and prudent.

Turning to the dispatch of Consumers' units, the record indicates Mr. Sansoucy failed to consider the factors that went into that determination. In the 2011 PSCR Plan, the dispatch is premised on the PROMOD production costing computer program, which projects future production costs as of the date of the

Plan, which, in turn, reflects the MISO dispatch protocol. 2 TR 123-124. Mr. Polena testified the factors that go into economic dispatching:

> In the Consumers Energy PROMOD model, the Company's units are dispatched to approximate the projected MISO dispatch. Consumers Energy's generating units are dispatched against an hourly projected LMP curve that represents the MISO market. This generally means that the Consumers Energy units are dispatched when their dispatch cost is less than the MISO LMP in a specific hour and not dispatched when their dispatch cost is more than the MISO LMP in a specific hour. Of course, there are various constraints that are enforced that affect the unit's output from hour to hour or also affects whether a unit is committed or not. These include constraints such as must-run status, start-up costs, start-up times, minimum run times, minimum down times, etc. For example, all Consumers Energy coal units, including the Whiting units, are offered into the MISO market as "must-run" units. This means that they can be dispatched to their minimum ratings, but cannot be cycled on and off. Cycling units, such as the Zeeland combined-cycle unit, can be cycled on and off, but subject to constraints such as start-up costs, start-up time, minimum run time and minimum down time. This methodology models the physical characteristics of the generating plants. That is, generally speaking, base-load coal plants are offered as must-run plants because they extract the maximum efficiencies from operation by running as much as possible at the highest output level possible. Cycling units, on the other hand, are designed to be dispatched on and off the system, as managed by MISO, to serve a fluctuating demand from customers.
>
> Since the Consumers Energy PROMOD model dispatches the units against an LMP curve, if the Zeeland combined-cycle unit were to dispatch more because of some change in the assumptions used to calculate the dispatch cost, that does not mean that the Whiting units would dispatch any less, since the Whiting units dispatch is determined by their dispatch cost relative to the MISO LMP, not relative to the Zeeland combined cycle dispatch cost.
>
> 2 TR 125-126.

In regards to Mr. Sansoucy's argument that designating Zeeland as must run in place of Whiting would result in significant savings, Mr. Ronk testified:

> [I]t is in the best financial interest of the customer to allow the MISO to dispatch the Zeeland Combined Cycle Plant so that the unit is economic against the market, and allow the Company to

purchase less expensive energy from the Midwest Energy Market when it is economic to do so. Regarding competitive spot gas pricing, our gas supply contract for day-ahead gas purchases for the Zeeland Combined Cycle and Combustion Turbine Plant has two tiers of pricing. Gas deliveries to the Zeeland generating units cost more if more than 100,000 MMBtus/day are delivered to the Zeeland generating units. Designating the Zeeland Combined Cycle Plant as a “must run” unit would cost the same or more, if the 100,000 MMBtus/day threshold is achieved, on a per-unit cost of gas basis, than offering the Zeeland Combined Cycle Plant as a cycling facility.

More importantly, when a generating unit is offered as a “must run” unit, the unit will operate at least its minimum reliable output level for the period that it is being offered. As a result, generating unit will incur its operating costs for that period even if the value of the energy being produced is not sufficient to cover the operating cost. In periods where the value of energy is sufficiently volatile to create doubt as to the economic viability of the “must run” strategy, the cycling strategy provides more flexibility to respond to changing conditions and thus reduce PSCR costs.

With coal fired units, which are generally not designed to cycle and require a lengthy, labor intensive startup sequence, the “must run” strategy provides for high availability with relatively low fuel cost and fuel cost volatility. Decisions to offer a coal unit as a cycling unit potentially reduces the flexibility to respond to electric price volatility and substantially increase the probability of increased periodic and unplanned outages. Accordingly, with the electric, gas and coal pricing forecast assumptions available at the time the 2011 PSCR Plan was developed, the Company modeled the Zeeland Combined Cycle Plant as a cycling unit and the Coal fired units as must run units. This strategy provides a reasonable estimate of the amount of electricity to be produced by each generator, a reasonable estimate of the amount of fuel to be consumed by each generator, a reasonable estimate of the emissions to be made by each generating unit, a reasonable estimate of the power supply costs to be incurred, and a reasonable estimate of the PSCR factor required to be used in recovery of costs from customers. To the extent that the Company experiences changes in electricity, coal and natural gas price forecasts during the operating year, the effects of those changes can be addressed in monthly adjustments to the PSCR factor (although not exceeding the maximum PSCR factor self implemented by the Company or determined by the Commission) and in the PSCR reconciliation case filed at the conclusion of the operating year.

3 TR 331-333

Based on foregoing, the PROMOD model provides economic dispatch in a manner that approximates projected MISO dispatch, i.e. on an hourly basis Consumers' plants are dispatched when their costs are less than the MISO Locational Marginal Price and not dispatched when the cost is greater. [13] To achieve maximum economic and operational efficiencies, coal-fired units are dispatched as must run and operated to provide the highest output possible. When demand increases, natural gas plants such as Zeeland are brought into operation to supplement output. Accordingly, Mr. Sansoucy's proposal to switch the designations of Whiting and Zeeland is, from the perspective of economy and operation, unreasonable and imprudent. Conversely, and consistent with the evidence on this record, the dispatch proposed in the 2011 PSCR Plan, along with the underlying determinations, are reasonable and prudent.

V.

CONCLUSION

Based on the foregoing, it is recommended that the Commission approve Consumers' 2011 PSCR Plan, except the System Power Supply Cost should be reduced by $2,995,000, with a corresponding reduction to the PSCR Factor, to rectify the error in the natural gas costs attributed to Zeeland. Exhibits A-1 and MEC-4 (Revised).

[13] Mr. Sansoucy does "not take issue with the PROMOD program used to represent MISO dispatch in this case." 3 TR 431.

MICHIGAN ADMINISTRATIVE HEARING SYSTEM
For the Michigan Public Service Commission

Dennis Mack

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Dennis W. Mack
Administrative Law Judge

October 12, 2011
Lansing, Michigan